



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/495,207	01/31/2000	Robert E. Robotham	1400.4100242	4551

25697 7590 04/08/2009  
ROSS D. SNYDER & ASSOCIATES, INC.  
PO BOX 164075  
AUSTIN, TX 78716-4075

EXAMINER
----------

WEIDNER, TIMOTHY J

ART UNIT	PAPER NUMBER
----------	--------------

2419

MAIL DATE	DELIVERY MODE
-----------	---------------

04/08/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<p align="center"><b>Advisory Action</b> <b>Before the Filing of an Appeal Brief</b></p>	<p><b>Application No.</b> 09/495,207</p>	<p><b>Applicant(s)</b> ROBOTHAM, ROBERT E.</p>	
	<p><b>Examiner</b> Timothy J. Weidner</p>	<p><b>Art Unit</b> 2419</p>	

**--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

THE REPLY FILED 18 March 2009 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.  
b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**NOTICE OF APPEAL**

2. ☐ The Notice of Appeal was filed on \_\_\_\_\_. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

**AMENDMENTS**

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because  
(a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);  
(b) ☐ They raise the issue of new matter (see NOTE below);  
(c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or  
(d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: \_\_\_\_\_. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).  
5. ☒ Applicant's reply has overcome the following rejection(s): 35 USC 112.  
6. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).  
7. ☒ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.  
The status of the claim(s) is (or will be) as follows:  
Claim(s) allowed: \_\_\_\_\_.  
Claim(s) objected to: \_\_\_\_\_.  
Claim(s) rejected: 1-37.  
Claim(s) withdrawn from consideration: \_\_\_\_\_.

**AFFIDAVIT OR OTHER EVIDENCE**

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).  
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).  
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

**REQUEST FOR RECONSIDERATION/OTHER**

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because:  
See Continuation Sheet.  
12. ☐ Note the attached Information *Disclosure Statement*(s). (PTO/SB/08) Paper No(s). \_\_\_\_\_  
13. ☐ Other: \_\_\_\_\_.

/Edan Orgad/  
Supervisory Patent Examiner, Art Unit 2419

Continuation of 11. does NOT place the application in condition for allowance because: Regarding finality, argument on pages 11-12, the supposed "new issues," i.e. requirements for supplemental oath or declaration and a brief summary of the invention, have been withdrawn as explained below. Therefore, the finality is maintained.

Regarding the requirement for a supplemental oath or declaration, argument on pages 11-12, the detailed specification is treated as "the statement of invention" of 37 CFR 1.67(b). Therefore, the requirement is withdrawn.

Regarding the objection to the specification for not containing a brief summary of the invention, argument on pages 12-13 states "37 CFR § 1.73 merely states that a "brief summary of the invention... should precede the detailed description" and includes the adverb clause, "when set forth," which Applicant submits indicates that a brief summary of the invention need not be set forth in a utility application." Therefore, the objection is withdrawn.

Regarding the rejections under 35 USC 112, 2nd paragraph, argument on page 13 is directed to amendments. The rejections under 35 USC 112, 2nd paragraph are withdrawn.

Regarding the rejections of claims 1-37 under 35 USC 103, each is addressed hereafter. Considering the arguments, it appears the applicant is relying on an old version of the MPEP, e.g. arguments page 14, which cites a paragraph from an old version of section 2143 no longer present in the current edition.

Regarding claims 1, 10, 17, and 25, arguments state the cited references may not teach "queuing the identity of a virtual connection in a queue when data that constitute a complete packet are buffered in a corresponding buffer" and further states the examiner may not have recited a teaching, suggestion, or motivation. These arguments were addressed in the previous office action. However, to be clear, Sorinsuo teaches part of the limitation, i.e. "data that constitute a complete packet are buffered in a corresponding buffer," while appearing silent as to queuing an identity (column 9, lines 14-16). Shimojo teaches the entire limitation (column 17, lines 19-38). Although Shimojo refers to a cell, Shimojo equates cells to packets (column 10, lines 20-30). The motivation to combine was given in the rejection, which is to associate the VCI with various connection parameters, and to output the data accordingly. Further, the combination yields predictable results. Therefore, the rejections are maintained.

Further, regarding claims 1, 10, 17, and 25, arguments state Sorinsuo may not teach "obtaining prioritization information." These arguments were addressed in the previous office action. The cited portion of Sorinsuo teaches obtaining prioritization information for the merged virtual connection by teaching certain packets may dropped, buffered ordinarily, or buffered in a bypass queue (columns 9 and 9-10, lines 17-32 and 64-4 respectively), which is the same concept as prioritization, i.e. a buffered packet has priority over a dropped packet. Further, Shimojo is replete with prioritization. Therefore, the rejections are maintained.

Further, regarding claims 1, 10, 17, and 25, arguments state the letter "X" in Sorinsuo may not teach "a merged identifier." These arguments were addressed in the previous office action. Sorinsuo teaches "X" which refers to "VCCout" which is a merged identifier (figure 9, items 930 and 960). Therefore, the rejections are maintained.

Further, regarding claim 25, arguments state Shimojo may not teach "different ones of the intervals." Shimojo teaches different intervals between t1, t2, t3, and t4 (column 25, lines 9-18). Therefore, the rejections are maintained.

Regarding claims 2, 18, and 26, arguments state Sorinsuo may not teach dequeuing based on the prioritization information. These arguments were addressed in the previous office action. Sorinsuo teaches various priority options including the treatment of OAM cells (columns 9-10, lines 64-4), i.e. obtaining prioritization information. Packets are transmitted in the order that complete packets are received including when OAM cells are buffered as ordinary cells, i.e. based on the prioritization information (column 9, lines 57-64). Therefore, the rejections are maintained.

Regarding claims 3, 11, 19, and 27, arguments state the rejection does not address every limitation. These arguments were addressed in the previous office action. Sorinsuo teaches scheduling can support priorities (column 10, lines 30-31) and classes (column 7, lines 42-50), but may not explicitly teach the queue includes a plurality of queues corresponding to a plurality of classes, wherein queueing the identity includes doing so into one of the queues based on class. Shimojo teaches the queues includes a plurality of queues corresponding to classes (column 24, lines 39-46), and likewise teaches the flows may include VCCs and different classes (column 20, lines 1-9). It would have been obvious to one of ordinary skill in the art at the time the invention was made to queue the identity into one of a plurality of queues based on class to associate the VCI with various connection parameters, and to output the data accordingly. Further, the combination yields predictable results. Therefore, the rejections are maintained.

Regarding claims 4, 12, 20, and 28, arguments state the cited references do not teach a linked list. These arguments were addressed in the previous office action. A chain of buffer pointers is a linked list. Therefore, the rejections are maintained.

Regarding claims 5, 13, 21, and 29, arguments state the cited references may not teach "wherein the prioritization information allocates available bandwidth on the merged virtual connection based on class." These arguments were addressed in the previous office action. Sorinsuo teaches the prioritization information may include class (column 7, lines 42-50), and further outputs the packets on a single VCC (column 8, lines 25-35), i.e. allocates bandwidth on the merged virtual connection based on class. Therefore, the rejections are maintained.

Regarding claims 6, 22, and 30, arguments state the cited references appear to refer to a "buffer state list" only in the context of non-prioritized operation. Examiner respectfully disagrees. Sorinsuo teaches "the scheduler goes through the buffer state list on a round robin fashion, and for the same priority connections" (column 10, lines 22-25). Round-robin itself is a type of prioritization, and further the scheduler operates in accordance with the recited priority connections. Further, the combination yields predictable results. Therefore, the rejections are maintained.

Regarding claims 7, 23, and 31, arguments rely on the independent claims addressed above. Therefore, the rejections are maintained.

Regarding claims 8, 24, and 32, arguments state "While the Examiner cites "(e.g., see col. 9, lines 7-8)," Applicant does not see such portion as to "determining that data that constitute a complete packet are buffered."" These arguments were addressed in the previous office action. Sorinsuo teaches various end of message indicators for tracking when a complete packet is buffered (column 9, lines 7-16). Further, the combination yields predictable results. Therefore, the rejections are maintained.

Regarding claims 9 and 33, arguments state the references may not teach "an additional virtual connection." These arguments were addressed in the previous office action. Sorinsuo teaches the output merged virtual connection is comprised of many virtual connections, i.e. additional virtual connections (figure 9, items 930, 934, 960 and column 9, lines 39-51). Further, the combination yields predictable results. Therefore, the rejections are maintained.

Regarding claim 14, arguments state the cited references may not teach "wherein the prioritization information causes transitions between classes". These arguments were addressed in the previous office action. Sorinsuo teaches scheduling can support priorities (column 10, lines 30-31) and classes (column 7, lines 42-50), but may not explicitly teach the prioritization information causes transitions between classes for dequeuing based on a number of packets for a particular class. Shimojo teaches dequeuing of data is performed in intervals (column 25, lines 3-8), where different classes receive priority for different ones of the intervals (column 24, lines 39-46) based on the number of packets for a particular class (column 24, lines 65-67) for the purpose of avoiding underflow (column 24, lines 48-59). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have the prioritization information cause transitions between classes for dequeuing based on the number of packets for a particular class to avoid underflow. Further, the combination yields predictable results. Therefore, the rejections are maintained.

Regarding claims 15 and 16, arguments state the cited references may teach away from "the virtual connection merging system is included in the ingress portion of a communication switch." These arguments were addressed in a previous office action. Sorinsuo does not teach away. Sorinsuo teaches "... may be implemented as a stand-alone chip on the output data path, or integrated in the switch buffer management." The switch buffer management, according to figure 9, item 932, and figure 11, items 1102 and 1120 appears to be located on an ingress portion of the switch. Therefore, the rejections are maintained.

Regarding claim 34, arguments state "Examiner has failed to establish that the public gained the benefit of the subject matter recited in claim 34 from the teachings of the cited reference." Examiner respectfully disagrees. MPEP 2112.II states "There is no requirement that a person of ordinary skill in the art would have recognized the inherent disclosure at the time of invention, but only that the subject matter is in fact inherent in the prior art reference. Schering Corp. v. Geneva Pharm. Inc., 339 F.3d 1373, 1377, 67 USPQ2d 1664, 1668 (Fed. Cir. 2003)." The rationale provided in the previous office action is maintained, i.e. "limiting a number of times the identity of the virtual connection may be queued in the queue" is inherent in the cited references because every queue has a limited size, thereby limiting the number of times the identity of the virtual connection may be queued. Therefore, the rejection is maintained.

Regarding claim 35, arguments state the cited references may not teach "during a particular interval for which it has priority." These arguments were addressed in the previous office action. Sorinsuo teaches scheduling can support priorities (column 10, lines 30-31) and classes (column 7, lines 42-50), but may not explicitly teach reverting to a highest priority. Shimojo teaches generating a data stream with priority control among classes by issuing transfer commands in intervals (column 25, lines 3-8) where part of the background is referred to (column 24, lines 39-49). The background referred to teaches issuing a transfer command to a class-1 queue when the number of cells  $N_a$  in the class-2 queue is zero (column 6, lines 1-4), i.e. the class-1 queue is a highest priority class when class-2 is empty, for the purpose of avoiding a vain-command. It would have been obvious to one of ordinary skill in the art to revert the priority for the particular interval to a highest priority class to avoid a vain-command. Further, the combination yields predictable results. Therefore, the rejection is maintained.

Regarding claim 36, arguments state the cited references may not teach "incrementing a pointer within a prioritization table." These arguments were addressed in the previous office action. Applicant appears not to notice the reference to Shimojo, column 22, lines 20-30, which teaches incrementing a pointer within a prioritization table. Further, the combination yields predictable results. Therefore, the rejection is maintained.

Regarding claim 37, arguments state the cited references may not teach "including a predetermined number of packets corresponding to that class in the data stream." These arguments were addressed in the previous office action. Shimojo teaches transmitting a predetermined number of packets  $Ma2$  during an interval (column 25, lines 3-8) corresponding to a particular class (column 24, lines 39-46) for the purpose of avoiding underflow (column 24, lines 48-59). It would have been obvious to one of ordinary skill in the art at the time the invention was made to transmit a predetermined number of packets during each interval to avoid underflow. Further, the combination yields predictable results. Therefore, the rejection is maintained..